BIODEGRADABLE MAGNESIUM IMPLANTS - HOW DO THEY CORRODE IN-VIVO?

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Abstract

Biodegradable magnesium implants are currently breaking the paradigm of designing and producing only corrosion resistant metallic biomaterials. The academic and industrial interest in this novel class of biomaterials is increasing dramatically in the recent years. First biodegradable metal implants have been realized as vascular stents and bone screws. However, the knowledge of the underlying degradation mechanism of these metal implants remains mainly undiscovered.

This lecture will summarize the current published knowledge and recent advances in elucidating the in-vivo corrosion processes of these novel biodegradable magnesium implants [1].

Reference

[1] F. Witte, N. Hort, F. Feyerabend, "Biodegradable magnesium implants – How do they corrode in-vivo", *JOM* 63/4 (2011), *to be published*.